

IN THE CLAIMS

Please amend the claims as follows:

1-20. (Canceled)

21. (Currently Amended) A cardiac rhythm management device, comprising:

means for sensing atrial depolarizations;

means for sensing ventricular depolarizations;

~~means for interpreting sensed signals and detecting atrial or ventricular senses when the sensed signals exceed respective atrial and ventricular sensing threshold values;~~

means for detecting an atrial sense when a signal generated by the atrial sensing means exceeds an atrial sensing threshold value;

means for detecting a ventricular sense when a signal generated by the ventricular sensing means exceeds a ventricular sensing threshold value;

means for measuring atrial and ventricular rates;

means for blanking the atrial sensing means for a blanking interval after detection of a ventricular sense; and,

means for shortening the blanking interval when a ventricular rate above a specified limit rate is detected.

22. (Previously Presented) The device of claim 21 further comprising means for leaving unaffected a post-ventricular atrial refractory period used to limit an atrial-triggered pacing rate and prevent pacemaker mediated tachycardia when the blanking interval is shortened.

23. (Previously Presented) The device of claim 21 further comprising means for increasing the specificity of the atrial sensing means when the blanking interval is shortened.

24. (Previously Presented) The device of claim 21 further comprising means for raising the atrial sensing threshold value when the blanking interval is shortened.

25. (Previously Presented) The device of claim 21 further comprising means for filtering sensed signals from the atrial sensing means with a narrower bandwidth when the blanking interval is shortened.

26. (Previously Presented) The device of claim 21 further comprising means for discontinuing blanking of the atrial sensing means when a ventricular rate above a specified limit value is detected.

27. (Previously Presented) The device of claim 21 further comprising means for delivering defibrillation shocks to an atrium.

28. (Previously Presented) The device of claim 21 further comprising means for delivering atrial pacing pulses in accordance with an anti-tachycardia pacing mode when an atrial rate in a tachycardia detection zone is detected.

29. (Previously Presented) The device of claim 21 further comprising means for delivering an atrial tachyarrhythmia therapy if an atrial tachyarrhythmia is detected wherein the atrial tachyarrhythmia therapy is selected between atrial anti-tachycardia pacing and an atrial defibrillation shock.

30. (Previously Presented) The device of claim 21 further comprising means for delivering ventricular pacing pulses in accordance with an anti-tachycardia pacing mode when a ventricular rate in a tachycardia detection zone is detected.

31. (Previously Presented) The device of claim 21 further comprising means for delivering a ventricular defibrillation shock when a ventricular rate in a fibrillation detection zone is detected.

32. (New) The device of claim 21 further comprising means for varying the specificity of the atrial sensing channel in accordance with the detected ventricular rate.

33. (New) The device of claim 21 further comprising means for varying the length of the atrial sensing blanking interval in accordance with the detected ventricular rate.

34. (New) A method for operating a cardiac rhythm management device comprising:

- sensing atrial depolarizations through an atrial sensing channel;
- sensing ventricular depolarizations through a ventricular sensing channel;
- interpreting sensed signals generated by the sensing channels and detecting atrial or ventricular senses when the sensed signals exceed respective atrial and ventricular sensing threshold values;
- measuring atrial and ventricular rates;
- blanking the atrial sensing channel after detection of a ventricular sense for a specified blanking interval; and,
- shortening the blanking interval for the atrial sensing channel when a ventricular rate above a specified limit rate is detected;
- delivering ventricular pacing pulses in accordance with an anti-tachycardia pacing mode when a ventricular rate in a tachycardia detection zone is detected;
- delivering a ventricular defibrillation shock when a ventricular rate in a fibrillation detection zone is detected; and,
- delivering an atrial tachyarrhythmia therapy if an atrial rate in an atrial tachyarrhythmia zone is detected.

35. (New) The method of claim 34 wherein the atrial tachyarrhythmia therapy is selected from atrial anti-tachycardia pacing and an atrial defibrillation shock.

36. (New) A method for operating a cardiac rhythm management device comprising:

- sensing atrial depolarizations through an atrial sensing channel;
- sensing ventricular depolarizations through a ventricular sensing channel;
- interpreting sensed signals generated by the sensing channels and detecting atrial or ventricular senses when the sensed signals exceed respective atrial and ventricular sensing threshold values;
- measuring atrial and ventricular rates;
- blanking the atrial sensing channel after detection of a ventricular sense for a specified blanking interval;
- shortening the blanking interval for the atrial sensing channel when a ventricular rate above a specified limit rate is detected; and,
- varying the specificity of the atrial sensing channel in accordance with the detected ventricular rate.

37. (New) The method of claim 36 further comprising varying the length of the atrial sensing blanking interval in accordance with the detected ventricular rate.